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THE PERMANENT HOUSES AND HUTS OF THE ESQUIMAUX.*

By Richard King, M.D. Read before the Society.

Of the arts and manufactures of the Esquimaux, the houses, from their construction, and the variety of the material of which they are composed, display, perhaps, the greatest ingenuity. This race of fishermen inhabit the northern coast of America, from Prince William's Sound on the Pacific, to Labrador on the Atlantic; and although their hunting-grounds extend about a degree of latitude inland, their dwellings are almost invariably raised near the sea-shore, and are either permanent or temporary, the character of them depending upon the locality and the material at the workman's disposal. But even those who have fixed dwellings leave them in the summer for tents suited to their migratory habits. The Esquimaux of Greenland inhabit a low hut, built with stones two or three yards high, with a flat roof of wood covered with turf, and the same plentiful material is crammed between the stones forming the walls. It has neither door nor chimney, the use of both being supplied by a vaulted passage, made of stone and earth, two or three fathoms long, entering through the middle of the house. The floor is divided into several departments, resembling horses' stalls, by skins reaching from the posts that support the roof to the wall. Each family has its separate room, and each room in front a window formed of seal skin parchment, which is white and transparent. The ceiling and walls are lined with seal skins, which once formed the covering of their boats, but rendered by age useless for that purpose. In the room beneath the window, attached to the whole length of the wall, is a deal bench raised half a yard from the ground, and reserved, as we do best rooms, for visitors. A similar bench is attached to the back wall of the room as sleeping places for the family, the bedding consisting of rein-deer skins. These benches are also used as sofas by day, the women sitting in the rear cross-legged like tailors, and the men in the ordinary sitting position.

In Gilbert's Sound, instead of the walls being formed of stone, John Davis informs us that they are made of wood; while at Regent's Bay, according to Sir John Ross, who obtained his information from hearsay, stone-built houses are again used, and the roof, instead of being flat, is arched, and the floor sunk three feet in the earth, a description which exactly answers for the habitations of the Esquimaux of Labrador.

From the Coppermine river along the coast westward, and thence to Prince William's Sound, the winter houses are built of drift wood, which is found along the whole route in more or less abundance. At Norton Sound, a sloping roof without any side walls is the fashion, and instead of raised benches, the floor is formed of logs, the entrance being at one end, with a fireplace just within it, and a small hole to let the smoke out. From Norton Sound to Point Barrow, the houses vary in their construction according to the nature of the ground and the taste of the inhabitants. Some are wholly above ground, some have the roof scarcely raised above it, and others resemble those of the natives of Norton and Prince William's Sounds; but they all agree in being constructed with drift wood covered with peat, and in having the light admitted through a hole in the roof, covered with the intestines of sea animals, for a window. They are said by those who have seen them, to be very comfortable abodes, and now and then of considerable size. One, situated between the Mackenzie and Coppermine rivers, was in the interior found to be a square of 27 feet, having the log roof supported on two strong ridge poles, two feet apart, and resting on four upright posts. The floor in the centre, formed of split logs, dressed and laid with great care, was surrounded by a raised border about three feet wide, intended for seats. The walls, three feet high, were inclined outwards for the convenience of leaning the back against them, and the ascent to the door, which was on the south side, was formed of logs. The outside, covered with earth, had nearly an hemispherical form, and around its base were arranged the skulls of twenty-one whales. There was a square hole in the roof, and the centre log of the floor had a basin-shaped cavity, one foot in diameter, probably intended for a lamp.

The most extraordinary permanent edifices of the Esquimaux are those constructed of the bones of whales, walruses, and other animals. Sir Martin Frobisher first makes mention of this kind of dwelling as existing at Labrador, and Sir Edward Parry and Captain Lyon afterwards found the same style of house adopted by the natives of Melville Peninsula and of Igloolik. They are built circular, and of a dome-like form; the lower part or foundation being of stones, and the rest of bones gradually inclining inwards and meeting at the top. The crevices as well as the whole of the outside are then covered with turf, which with the additional coating of snow in the winter serves most effectually to exclude the cold air. It is about 17 or 18 feet at its base, and about 9 feet in height. The entrance is towards the south, and consists of a passage ten feet long, and not more than two feet in height and breadth; it is built of flat slabs of stone, and has the same external covering as that of the hut. The beds are raised by stones two feet from the ground, and occupy about one-third of the apartment at the inner end. Near the huts when they were discovered were large tumuli, which had been formerly dwellings, but which were then solid moss-covered mounds.

Although during winter the Esquimaux generally occupy permanent dwellings, it not unfrequently happens, from scarcity of provision, or some other calamity, that it is necessary for them before spring arrives to seek a new home. When we consider the low temperature of the country which many of the communities inhabit; that in many parts it is destitute of wood even for fuel; that the fixed habitations being cemented together by frost cannot be removed, and that the summer tents from their construction are not calculated to withstand the cold, we are at first led to suppose that, if driven at the inclement season from his accustomed haunts, death must soon close the sufferings of the poor inhabitants of the Pole. But this is far from being the case, for these ingenious people have learnt to convert snow into building materials, by which means they can raise an establishment for their families in a few hours; an establishment which, from the purity of the material of which it is composed, the elegance of its construction, and the translucency of its walls, gives it an appearance far superior to a marble building. "One may survey it," says Sir J. Franklin, "with feelings somewhat akin to those produced by the contemplation of a Grecian temple reared by Phidias; both are triumphs of art, inimitable of their kind."

Having selected a spot where the snow is sufficiently compact, they commence by tracing out a circle of from eight to fifteen feet in diameter, proportioned to the number of occupants the hut is to contain. They then prepare a number of oblong slabs of snow of six or seven inches thick and about two feet in length, which are tenacious enough to admit of being moved without breaking or even losing the sharpness of their angles. These slabs, which have a slight degree of curvature corresponding with the circular foundation, are piled upon each other exactly like courses of hewn stone, and care is taken to make them fit closely to each other by running a knife adroitly along the under part and sides, and to cut them so as to give the wall a slight inclination inwards. The after tier is thus laid on by one man standing within the wall, who is supplied with material by one or more assistants from without. But for the better convenience of transmitting this supply to the workman, when the wall has attained a height of five or six feet, a hole is cut on the south side close to the ground. Thus they continue labouring till they have brought the sides nearly to meet in a perfect and well-constructed dome, sometimes nine or ten feet high in the centre; and this they take particular care in finishing, by fitting the last block or key-stone very nicely in the centre, dropping it into its place from the outside, though it is still done by the man within. The people outside are in the meantime occupied in throwing up snow with the snow-shovel, and in stuffing in [illegible] sides of the

The builder next proceeds to let himself out by enlarging the hole on the south side into the form of a Gothic arch, intended as a doorway, three feet high and two feet and a half wide at the bottom; communicating with which he constructs two passages, each from ten to twelve feet long and from four to five feet in height, the lowest being that next the hut. The roofs of these passages are sometimes arched, but more generally made flat by slabs laid on horizontally. In first digging the snow for building the hut, the workmen take it principally from the part where the passages are to be made, which purposely brings the floor of the latter considerably lower than that of the hut, but in no part do they dig till the bare ground appears.

The work just described completes the walls of a hut, if a single apartment only be required; but if, on account of relationship, or from any other cause, several families are to reside under one roof, the passages are made common to all, and the first apartment, in that case made smaller, forms a kind of ante-chamber, from which the entrance is through an arched doorway, five feet high, into the inhabited apartments. When there are three of these, which is generally the case, the whole building, with its adjacent passages, forms a tolerably regular cross.

For the admission of light into the huts, a round hole is cut on one side of the roof of each apartment, and a circular plate of fresh-water ice, three or four inches thick and two feet in diameter, let into it. The light is soft and pleasant, like that transmitted through ground glass, and is quite sufficient for every purpose. If fresh-water ice is not within reach, melted snow is poured into a vessel and thus frozen into a transparent plate.

When after some time these edifices become surrounded by drift, it is only by the windows that they can be recognized as human habitations, and but for them one might walk completely over them without suspecting the little hive of human beings that is comfortably established below. This, however, is not always done with impunity when the thawing within has too much weakened the roofs, in which case a leg sometimes makes its way through, to the no small terror of the inmates.

The next thing to be done is to raise a bank of snow two feet six inches high, all round the interior of each apartment, except on the side next the door. This bank, which is neatly squared off, forms their beds and fire-place, the former occupying the sides, and the latter the end opposite the door. The passage left open up to the fire-place is between three and four feet wide. The beds are arranged by first covering the snow with a quantity of small stones, over which are laid their paddles, tent-poles, and some blades of whalebone. Above these they place a number of pieces of network, made of thin slips of whalebone, and lastly a quantity of twigs of birch. Their deer skins, which are very numerous, can now be spread without risk of their touching the snow; and such a bed is capable of affording not merely comfort but luxurious repose, in spite of the rigour of the climate.

With the lamps lighted and the hut full of people and dogs, a thermometer placed on the net over the fire indicates a temperature of 3[illegible], when removed two or three feet from this situation it falls to 32°, and placed close to the wall stands at 23°, the temperature of the open air at the time being 25° below zero. A greater degree of warmth than this produces extreme inconvenience by the dropping from the roofs. This they endeavour to obviate by applying a little piece of snow to the place from which the drop proceeds, and this adhering is for a short time an effectual remedy; but for several weeks in the spring, when the weather is too warm for these edifices, and still too cold for tents, they suffer much on this account.

The interior appearance of these habitations is rendered more beautiful when they are situated on the ice, which, being cleared of the snow, presents a flooring of that splendid blue, which is perhaps one of the richest colours in nature.

If it should happen that the family is increased by births or by the system of adoption in use amongst them, they have to enlarge their buildings, which they effect by adding another apartment, or by building a more [illegible]

* The author of the above interesting communication was one of the party who went out in the Arctic Land Expedition, under direction of the British Government, in search of Captain Sir John Ross. The information it contains therefore [illegible]